THE AMES Astrogram
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER, MOFFETT FIELD
March 20, 2000
on-line at: http://ccf.arc.nasa.gov/dx/

McDonald team delivers Shuttle report - Independent assessment raises safety/oversight concerns

On March 9, the Space Shuttle Independent Assessment Team (SIAT) chaired by Ames' Center Director Dr. Henry McDonald delivered its long-awaited report. The news for NASA was mixed. The media outcry was not.

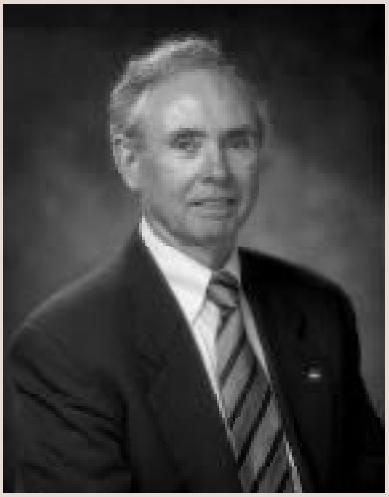

photo by Dominic Hart

Dr. Henry McDonald

On the one hand, the team reaffirmed that the Shuttle is a safe vehicle. They went on record as fully endorsing the continuation of Shuttle flights as soon as their immediate recommendations have been addressed. They also praised the skill, dedication, commitment and concern for safety of the entire Shuttle workforce.

On the other hand, the team expressed concern that privatization and reduction of NASA oversight may have contributed to a situation in which safety is not consistently valued as the number one priority over speed and cost cutting. They also suggested that downsizing of the NASA and contractor workforces may have led to an environment of stress and overwork in the area of Shuttle operations.

"In spite of the clear mandate from NASA that neither schedule nor cost should ever be allowed to compromise safety," the team reported, "the workforce has received a conflicting message due to the emphasis on achieving cost and staff reductions, and the pressures placed on increasing scheduled flights" in the push to build the International Space Station.

The SIAT declared that NASA must take a more active and direct role in Shuttle operations. There is a need for greater oversight in order to reduce risk factors, they reported. Cost and scheduling pressures have led to a situation where "oversight processes of considerable value, including safety and mission assurance and quality assurance, have been diluted or removed from the program," they observed. This must be addressed immediately, they concluded.

Responding to the report's findings, Joe Rothenberg, Associate Administrator for Space Flight at NASA Headquarters, reiterated NASA's commitment to safety first and foremost. He said that safety has been, and continues to be, NASA's number one priority. However, he recognized that the team pointed out that "there is a minimum level of government involvement" required to "maintain a continuity of knowledge" and safety. "We were below that level and about to get worse," he said. As a consequence of that realization, NASA has recognized that it has an "expertise problem" and therefore "downsizing is over," he stated.

Rothenberg went on to say that the agency plans to see that 800 new workers are hired to address problems and provide better inspection and oversight. The improvement will occur over a number of years as new workers are brought on board and trained in Shuttle procedures.

The reaction of the media was consistent and rather critical of NASA. "Stressed-out space workers. Too few NASA inspectors. Overly optimistic risk assessments. A contractor struggling to increase profits while maintaining safety." That was how the Orlando Sentinel summed up the situation. "Efforts to cut costs of operating the Space Shuttle are eroding safety," was the New York Times interpretation.

National Aeronautics and Space Administration

Space Shuttle
Independent Assessment Team

Report to Associate Administrator
Office of Space Flight

October - December 1999

March 7, 2000

Administrator Goldin took the findings in stride, reiterated the Agency's commitment to safety and lauded the McDonald committee for their fine work. Shuttle flight personnel at the Johnson Space Center were mandated by Associate Administrator Rothenberg's office to come up with a plan to address the report recommendations and propose implementation solutions.

In the interim, Shuttle processing continues for upcoming flights with NASA and contractor managers keeping an eye on both the findings of the SIAT and any recommendations that may emerge as a result.

By David Morse

NASA computer rocket science helps DeBakey heart pump team

NASA computer experts have been using a supercomputer to improve the NASA/DeBakey miniature heart assist pump, leading to on-going human trials with patients awaiting heart transplants. The experts suggested improvements after simulating blood flow through the pump using a NASA computer that normally models rocket fluid flow.

To date, physicians have implanted the heart-assist pump in 25 patients during European clinical trials. MicroMed Technology, Inc., Houston, TX, manufactures the pump, now called the DeBakey VAD™.

"Johnson Space Center, Houston, TX, and DeBakey Heart Center of Baylor College of Medicine, Houston, asked us to help them because of our experience with simulating fluid flow through rocket engines," said Dochan Kwak, Chief of Ames' Computational Physics and Simulation Branch (Code AIC). He and colleague Cetin Kiris analyzed blood flow through the battery-powered heart pump whose blade spins as fast as 12,500 rpm. "The speed of fluid flow through a rocket engine is faster than blood flow, but very similar in many ways," Kwak noted.

During initial development of the one-inch by three-inch implantable rotary heart pump, engineers noticed two major problems. Friction damaged blood cells because the device created turbulent flows through many pump parts; and there were stagnant regions in the pump that caused blood clotting, a major problem with ventricle assist devices.

Following supercomputer simulations, the NASA researchers were able to reduce red blood cell damage to an amount comfortably below acceptable limits. The improved blood flow pattern also reduces the tendency for blood clots to form.

"We worked with the team to make the blood flow more smoothly through the pump; that also removed the stagnant regions," Kwak said. Ames scientists first began assisting the NASA/Baylor team in 1993, and will continue to help this year and possibly for a longer period.

"Without the support of the NASA supercomputer design experts, the pump would not function as efficiently as it has," said Dallas Anderson, president and CEO of MicroMed, the company to which NASA granted exclusive rights for the pump in 1996.

In the two years after receiving the license for the pump from NASA, MicroMed gained international quality and electronic standards certifications, got permission to begin clinical trials in Europe and implanted the first device. The first patient, a 56-year-old man, received the DeBakey VAD™ in November 1998, in Berlin. The pump functioned normally and to its design specifications, Anderson said.

The device can pump more than 10 liters of blood per minute, about twice a normal heart's pumping needs. The pump has been in patients for as long as four months thus far. Eight of the patients have already gone on to have heart transplants.

"MicroMed will soon submit documentation to the Food and Drug Administration (FDA) for permission to conduct human clinical trials of the pump in the United States," Anderson said.

The pump is based in part on technology used in Space Shuttle fuel pumps. Developers predict that the heart pump will not only be a long term "bridge" to transplant, but will serve as a more permanent device to help recovering patients lead a more normal life. The concept for the pump began years ago with talks between Baylor College of Medicine's Dr. Michael DeBakey and one of his heart transplant patients, the late David Saucier, a NASA Johnson engineer who died in 1996.

Six months after his 1984 heart transplant, Saucier was back at work. With fellow NASA employees, as well as Dr. DeBakey, Dr. George Noon and other Baylor staff, Saucier worked evenings and weekends on the initial pump design.

"Since my own transplant, I have spent a lot of time visiting people who are waiting for a donor heart," Saucier said at the time. NASA began funding the project in 1992.

BY JOHN BLUCK

Annual call for NASA Software of the Year Awards

The annual call for nominations for the NASA Software of the Year Award has been issued. NASA's Chief Information Officer, Lee B. Holcomb, and NASA's Acting Chief Engineer, Keith L. Hudkins, who also chairs NASA's Inventions and Contributions Board (ICB), are co-sponsors. They are calling for submissions for the 2000 NASA Software of the Year Award to give recognition to software developed and owned by NASA.

Ames has won NASA Software of the Year for the past two years with the following software packages:

1999 - Remote Agent
Ross 3D Virtual Clinic (runner-up)

1998 - Center TRACON Automation System Software
Overset Tools for CFD Analysis (runner-up)

Over $180,000 was awarded to the members of these teams.

The award includes a certificate signed by the Administrator and a monetary award of up to $100,000.

In order to be eligible for nomination, the following criteria must be met:

- NASA must have an intellectual property interest
- The software has been supported, adopted, sponsored or used by NASA
- The software must be significant to the NASA mission
- Software program's experimental phases must have been completed.

Dr. Paul Kutler, Deputy Director, Information Systems has agreed to chair the Ames evaluation panel. This panel will review and determine the Ames final nomination(s). Then the selected software will be forwarded to the NASA Software Advisory Panel composed of software development experts from all NASA Centers and JPL in June. After review, this panel will submit the selection(s) to the ICB.

Submitting a Nomination

The NASA Form 1329 (ICB Space Act Award Application) must be completed for each entry. Copies of the software, sample applications, data, and descriptive documentation of the package should be included, in addition to evidence demonstrating the impact, ease of use, and degree of innovation and suitability of the entry. This information will be the primary data used by the panel in recommending awards. In addition, a NF 1679 (Invention Disclosure) and CTO-6 (Software Release) must be on file in the Commercial Technology Office.

Entries and supporting materials must be submitted to the Ames Commercial Technology Office, Attention Betsy Robinson, M.S. 202A-3 (Room 211C) no later than Friday, April 14.

For forms and specific award criteria information, please contact Betsy Robinson at brobinson@mail.arc.nasa.gov or at ext. 4-3360.

Center Briefs

Elusive gamma rays beware: GLAST investigation selected

NASA today announced the selection of an investigation to be flown on the Gamma Ray Large Area Space Telescope (GLAST) mission, planned for launch in 2005. In addition to the flight investigation, NASA selected four interdisciplinary science investigations to broaden the scientific expertise available to the project.

GLAST will explore the most energetic and violent events in a quest for the ultimate sources of energy in the Universe. Objects explored will include distant galaxies fueled by super massive black holes at the center, neutron stars and individual black holes, remnants of stars that have ended their life with an explosion (supernova), and many others at the extremes of mass and energy.

NEAR begins looking closely at Eros

Only a few days into the first close-up study of an asteroid, data from NASA's Near Earth Asteroid Rendezvous (NEAR) mission indicate that 433 Eros is no ordinary space rock.

Since the NEAR spacecraft met up with and began its historic orbit of Eros on Feb. 14, NEAR team members at the Johns Hopkins University Applied Physics Laboratory in Laurel, MD, which manages the mission for NASA, have pored over images and other early scientific returns. It will take months to unravel the deeper mysteries of Eros, but data from NEAR's final approach and first days of orbit offer tantalizing glimpses of an ancient surface covered with craters, grooves, layers, house-sized boulders and other complex features.

NASA begins building next mission to study comets

NASA's Comet Nucleus Tour, or CONTOUR mission, is closer to its launch when the project received approval to begin building the spacecraft. Planned for a July 2002 launch, CONTOUR is expected to encounter Comet Encke in November 2003 and Comet Schwassmann-Wachmann-3 in June 2006.

CONTOUR will fly past at least two comets and take high resolution images. It will also collect and analyze gas and dust to reveal the comet's makeup, greatly improving our knowledge of key characteristics of comet nuclei and providing an assessment of their diversity. CONTOUR also will clear up the many mysteries of how comets evolve as they approach the Sun and their ices begin to evaporate.

For more information see: http://www.contour2002.org and http://discovery.nasa.gov

Singh named Fellow of the AGU

Dr. Hanwant Singh, of the Ames Earth Science Division, code SG, was recently elected a Fellow of the American Geophysical Union (AGU), one of the few honors that the group confers.

AGU awards the prestigious fellowship to scientists who have attained acknowledged eminence in one or more branches of geophysics. The organization limits the number of fellows elected each year to no more than a tenth of a percent of its membership.

"I feel honored and wonderful because you not only get the award, but you are nominated by your peers," Singh said.

The honor is a lifetime achievement recognition, and much of Singh's work was in atmospheric sciences. An award ceremony is scheduled to take place at the fall meeting of the AGU in San Francisco.

Over the years, Singh contributed major theoretical and experimental ideas to advance the scientific understanding of atmospheric composition and chemistry. Singh is noted as the first scientist to show that select human-made halocarbon pollutants (e. g. methyl chloroform) could be used to estimate the global concentrations of hydroxyl (OH) radicals. One of the main ways nature cleanses itself is the reaction of OH radicals with chemicals.

Singh was also the first scientist to measure phosgene in the atmosphere and to show that carbon tetrachloride, an ozone-destroying chemical, is human-made. Recently he provided the first global measurements of acetone, alcohols and peroxyacetyl nitrate (PAN).

Singh's many contributions are documented in more than 150 scientific publications in the major scientific journals. His co-authors and collaborators include all three of the 1995 Nobel Laureates in chemistry.

Hanwant Singh

Singh also received the 1989 Frank A. Chambers Award for "outstanding achievement in the science and art of air pollution," the highest annual award of the Air and Waste Management Association. Singh was elected an Ames Associate Fellow in 1991, Ames' highest annual award. He received the NASA Exceptional Scientific Achievement Medal for "outstanding contribution to the science of atmospheric chemistry" in1998. Last year he received the H.J. Allen Prize for the best scientific paper (shared with M. Kankidou, P. Crutzen, and D. Jacob). Singh has also been a member of the Ames Basic Research Council and the Science and Technology Council, two bodies that advise Ames upper management on key scientific matters.

BY JOHN BLUCK

President Clinton and Senator Diane Feinstein descending the stairs of Air Force 1 after landing at Ames on March 3.

photo by Dominic Hart

JASON XI event a hit with the kids!

Project XI: "Going to Extremes," was a series of live one-hour satellite telecasts held February 28 through March I0, in the main auditorium, Bldg. N-201. During the telecasts, students were able to talk live via satellite with astronauts and scientists. In addition, a variety of "NASA Expo" hands-on student activities were also held in historic Hangar 1. Over 10,000 students and teachers attended the events, coming from 100 San Francisco Bay Area local schools.

photo by Astrid Terlep

Kids add their creations to the astrobiology mural.

photo by Astrid Terlep

One student excitedly cuts out her shuttle glider to enter into the glider competition.

photo by Pam Davoren

Ruben Ramos (center), Code SF aerospace engineer, gives students a real hands-on experience as they assist in a shuttle tile demonstration illustrating how technology enables research.

photo by Astrid Terlep

Students answer questions at the coral reef survey activity site.

JASON Project XI

photo by Astrid Terlep

Jessica White of the Tech Museum of San Jose launches Alka-Seltzer rockets with the kids. Henry Terlep (right), son of Astrid Terlep, has fun trying out his own rocket.

Students perform a simulated space mission in the space mission relay.

photo by Astrid Terlep

Children build shuttle gliders to enter in the glider competition.

photo by Astrid Terlep

Contestants enter the shuttle glider competition.

photo by Astrid Terlep

Interactive underwater sealife graphics programs provide an environment where kids designed their own coral reefs.

photo by Astrid Terlep

Project XI: "Going to Extremes" one-hour satellite telecasts were held February 28 through March I0, in the main auditorium, Bldg. N-201. Ed Alley, (right, standing) JASON XI volunteer, asks the students for their responses to the interactive quizzes, while Marissa Travers, (at computer console above left) of Code DXE, enters the student data into the computers.

Open House
Thursday, April 20
11:30 a.m. to 1:00 p.m.
Buildings 211 & 212

Come one, come all!

Ames' non-metallic and sheet-metal development centers invite you to visit their facilities so they can show their stuff!

There will be:

- demonstrations highlighting their unique skills,
- product displays representative of capabilities,
- sample products,
- answers for your questions, and
- hors d'oeuvres and drinks, too...

Tickets on sale for Cirque du Soleil

The NASA Ames Exchange is pleased to offer tickets to "DRALION" the newest Cirque du Soleil. The show is Thursday April 20 at 9:00 p.m., under the trademark Blue and Yellow Big Top at the San Jose Water Company located at 374 W. Santa Clara St. in San Jose.

"Dralion" is the fusion of ancient Chinese circus tradition and the avant-garde approach of Cirque du Soleil. Suspended in time between past and future, "Dralion" is a celebration of life and the four elements that maintain the natural order: air, water, fire, and earth.

The music borrows from more traditional sources, then bursts into the electro-symphonic realm of a world yet to come.

Innovation soars to new heights as it defies the laws of nature. "Dralion" is Cirque du Soleil at its purest.

Tickets will be available Monday April 3. For tickets or information, call Jodi Neal at ext. 4-0818. A limited number of seats are available.

Diversity recognition by EO Office

photos by Tom Trower

Deputy Director Bill Berry (left) poses with acting EO officer Herman Gardner and award recipients at a recent ceremony honoring those who have significantly contributed to the creation of a diverse multicultural workplace at Ames.

African American (AAAG)
Christine Johnson
Joe Shields
Mary Buford Howard
Patricia Powell
Rhonda Baker
Robert FInnie
Roz Jones
Sandra Williams

Asian and Pacific (AAAPIAG)
Daryl Wong
Frank Hui
Margaret Salas

Federally Employed Women (FEW)
Christine Munroe

Professional Admin (PAC)
K. Jean Nozaki

Multicultural Leadership Council (MLC)
Cynthia Carbon
David Morse
Joel Antipuesto
Mary Bravo
Sheila Johnson

Native American (NAAC)
Anita Abrego
Mike Liu
Tianna Shaw

Hispanic (HACE)
Carlos Torrez
Jolen Flores
Lupe Velasquez
Mark Leon
Phil Luna
Rogilito Flores

Christine Munroe, Patricia Powell, Herman Gardner, Rhonda Baker, Mary Buford Howard, Robert Finnie and Earnestine Parker (left to right).

Calendar & Classifieds

Ames Event Calendar

Model HO/HOn3 Railroad Train Club at Moffett Field invites train buffs to visit & join the club in Bldg. 126, across from the south end of Hangar One. The club is in particular need of low voltage electricians & scenery builders and maintainers. Work nights are usually on Friday nights from 7:30 p.m. to 9:30 p.m. Play time is Sunday from 2 p.m. to 4 p.m. For more info, call John Donovan at (408) 735-4954 (W) or (408) 281-2899 (H).

Jetstream Toastmasters, Mondays, 12 noon to 1 p.m., N-269/Rm. 179. Guests welcome. POC: Samson Cheung 4-2875 or Lich Tran 4-5997.

Ames Ballroom Dance Club, Tuesdays: Two Step (started 1/18), West Coast Swing 1/25, 2/1, 2/8, Waltz 2/15, 2/22, 2/29. 3 levels of classes, from Beg. to Int., 5:15 - 6:45 p.m. Moffett Training & Conference Center, Bldg. 3/Showroom. Women dancers are especially encouraged to join. POC: Helen Hwang, hwang@dm1.arc.nasa.gov.

Ames Child Care Center Board of Directors Mtg, Every other Thursday (check website for meeting dates), 12 noon to 2 p.m. , N269, Rm. 201. POC: David Korsmeyer, ext. 4-3114. Web site: http://accc.arc.nasa.gov

Native American Advisory Committee Mtg, Mar 28, 12 noon to 1 p.m., Ames Café. POC: Mike Liu at ext. 4-1132.

Ames Multicultural Leadership Council Mtg, Mar 29, 11:30 a.m. to 1 p.m., Galileo Rm/Ames Café. POC: Sheila Johnson, ext. 4-5054.

Ames Contractor Council Mtg, April 5, 11 a.m., N-200 Comm. Rm. POC: David Lawrence at ext. 4-6434.

Environmental, Health and Safety Monthly Information Forum, April 6, 8:30 a.m. to 9:30 a.m., Bldg. 19/Rm 1078. POC: Linda Vrabel at ext. 4-0924.

Hispanic Advisory Committee for Employees, April 6, 11:45 a.m. to 12:30 p.m., N-241/Rm 237. POC: Mary R. Valdez, at ext. 4-5819.

Ames African American Advisory Group Mtg, April 6, 11:30 a.m. to 12:30 p.m. POC: Robert Finnie at ext. 4-5230. Contact Robert for meeting place.

Nat'l Association of Retired Federal Employees, San Jose Chapter #50, Mtg, April 7, at the Elk's Club, 44 W. Alma Avenue, San Jose. Social hour: 10:30 a.m. Prog. & bus. mtg. follow lunch at 11:30 a.m. POCs: Mr. Rod Peery, Pres., (650) 967-9418 or NARFE 1-800-627-3394.

Ames Sailing Club Mtg, April 13, 11:30 a.m. to 1 p.m., N-262/Rm. 100. POC: Stan Phillips, ext. 4-3530.

Professional Administrative Council (PAC) Mtg., April 13, 10:30 a.m. to 11:30 a.m., Bldg. 245, Rm. 215. POC: Leslie Jacob, ext. 4-5059.

NFFE Local 997 Union General Mtg, April 19, noon to 1 p.m., Bldg. 19/Rm. 2017. Guests welcome. POC: Marianne Mosher at ext. 4-4055.

Ames Amateur Radio Club, April 20, 12 noon, N-260/Conf. Rm. POC: Mike Herrick, K6EAA at ext. 4-5477.

Ames Asian American Pacific Islander Advisory Group Mtg, April 20, 11:30 a.m. to 1 p.m., N-237/Rm. 101. POC: Daryl Wong, ext. 4-6889 or Margaret Salas, ext. 4-6755.

Ames Classifieds

Ads for the next issue should be sent to *astrogram@mail.arc.nasa.gov* by the Monday following publication of the present issue and must be resubmitted for each issue. Ads must involve personal needs or items; (no commercial/third-party ads) and will run on space-available basis only. First-time ads are given priority. Ads must include home phone numbers; Ames extensions and email addresses will be accepted for carpool and lost & found ads only. Due to the volume of material received, we are unable to verify the accuracy of the statements made in the ads.

Housing

Room for rent in house in midtown Palo Alto. Kitchen, bathroom & pool privileges. Tenant must be orderly, N/S. $600/mo. Dr. Jim Stevenson, ext. 4-5720.

For sale by owner: $529K, small horse ranch near Watsonville. Royal oaks, California/scenic area. 3 acres w/ trees & lots of open space. 3 bd/2 ba home/family rm w/ fireplace. Front/rear decks w/hot tub rm. 2 car garage w/laundry rm & storage rm. Barn, tack rm, corrals, workshop/electricity. Property fenced & outside lighting. Ron (408) 736-2150. Lv msg or call (831) 722-0130.

3 bd/1 ba house for rent near downtown Mountain View. Available April 1. $1,900 per month plus deposit, unfurnished, no pets. May also be available furnished for short-term rental. Call (650) 969-5581.

Miscellaneous

Fitness Flyer, almost new, $25, u-haul. Call (650) 962-9031after 6 p.m.

Night game Giant tickets. $50 for two. 4/13, 4/14, 4/28, 5/1, 5/5, 5/23, 5/24, 5/30, 5/31, 6/9, 6/12, 6/13, 6/16, 6/30, 7/13, 7/17, 7/18, 7/19, 8/3, 8/4, 8/7, 8/18, 8/21, 8/22, 9/5, 9/6, 9/7, 9/8, 9/18, 9/19, 9/21, 9/22. Mary (650) 712-4410.

Craftman 10 in. radial arm saw w/stand. Good cond. $250. Call (408) 266-4973 after 5:00 p.m.

Sega Game Gear w/3 games and carrying case. $85. Eilene (408) 979-9107.

Kitchen table and six chairs, good condition, $100 or B/O. 12-speed bicycle needs some attention but in good shape, $200 or B/O. Jason (650) 968-4635.

Daybed frame, boxspring and mattress, twin sized. Mattress and boxspring in good condition, frame missing wheels but useable. $25. Joe, (408) 247-1125 or olejnic@yahoo.com

Transportation

'70 Mustang Grande, 351 Clev. with completely refurbished interior, 158K miles, $3800. Call Marcia at 408/733-1629.

'85 Saab 900 Turbo, dependable 4 door with 5 speed A/C and Sunroof. 123K miles. $2800. Call Richard at 408/733-1629.

'89 Toyota Supra, Fun car for a son or daughter! Targa-top Classic, $5K or B/O, 154K mls. Call (408) 842-9576.

'89 Harley-Davidson 883 Hugger (Sportster). Excellent condition. Metallic blue. Custom pipes, chrome, seat, windshield. 10,900 miles. 2 HJC helmets included. $4,950. Call (650) 969-5581.

'90 Ford Taurus, 4dr, AT, PW, PD, AC. 132K mls, good shape. Asking $2,800 or B/O. Call (650) 967 7659.

'95 Toyota Tacoma X-Tra Cab LX, 37K, AT, AC, CC,PS, tilt wheel, bedliner, custom shell, rear sliding windows, excellent condition. Asking $10,000 Firm. Desiree (510) 651-7196.

'95 Chevy Blazer LT 4x4, fully loaded, keyless entry , leather int., PS, anti-lock brakes, roof rack, off road package, tow package, A/C, cassette, p-glass, 78,000 miles. $14,300/or B/O. Bob (408) 736-4039.

'98 Suzuki GSXR 750 Like new, never down, 8,400 mls. Black, silver and red. Bike is stock except for K&N air filter. Also has a protech rear stand. Bike was always garaged. Email me for picture. Asking $7,200. Mac (408) 578-0590. Email: mac@rcracing.com

'98 Taurus 4-dr sedan, automatic, A/C, power windows, alarm/lock, $13200. Great condition with Less than 16K miles! Larry or Teri, (408) 266-2535, piercepack@hotmail.com

'99 Ford Ranger XLT-Sport-Blk, 2 door-extd cab, 2WD, automatic w/spd cntrl, remote entry syst, A/C, AM/FM/cass/CD, chrome wheels, bed liner, tow pkg, ABS, 3yr/36K bmpr-bmpr warantee+, exc cond/almost new. Only 11K mls, $17K, Mike (650) 712-1690 eves.

Lost & Found

Moffett Field Lost and Found may be reached via ext. 4-5416 at any time. Residents and employees at Ames may also use Internet browser at: http://ccf.arc.nasa.gov/codejp/pages/lostFound.html to view a list of found property and obtain specific instructions for reporting lost or found property and how to recover found property. Call Moffett Field security police investigations section at ext. 4-1359 or email at: mfine@mail.arc.nasa.gov.

Vacation rental

Lake Tahoe-Squaw Valley twnhouse, 3bd/2ba, view of slopes, close to lifts. Wkend $470, midwk $175 night. Includes linens, firewood. Call (650) 968-4155 or email: DBMcKellar@aol.com

Beautiful Lake Tahoe-Squaw Valley-Olympic Village Inn for 4 people. Full kitchen, TV/VCR, Pool, Spa, BBQ, Free Bikes, walk to lifts. $450 for 4nights/5 days, 6/18/00 to 6/22/00, Sunday to Thursday. Call Juliet 650-321-9008,Liuhsinmei@aol.com for more details.

Ames Retirements

Name	Code	Date
Joaquin Barrios	JIR	3-03-00
William R. Henry	I	3-31-00
Michael G. Herrick	FEF	3-31-00
Walter F. Brooks	IC	4-01-00
Peter Rose	JIR	4-07-00

Carpool

Carpool partners wanted to share driving & riding from San Francisco to Ames. Benny, ext. 4-5432 or email bcheung@mail.arc.nasa.gov.

Looking for a ride that likes to come in at 6:30 a.m. and goes home at 3:00 p.m. If interested, call Maria at 4-4394. Live in San Mateo and work here at Moffett Field. I do not drive, but willing to pay for gas, whatever the driver feels that it would be a fair deal.

Looking to start or join a carpool. Live in Union City, 3/4-mls from Alvarado-Niles & 880. Flexible work schedule and driving arrangements. Contact Mark at ext. 4-0102 or mfulton@mail.arc.nasa.gov to discuss this further.

Ames radio information for employees

1700KHz AM radio--information radio announcements for Ames employees during emergencies.

Ames Obituaries

Name	Length of Service	Date of Passing
Harold Gerdes	8 years	1/20/00
Woodrow (Woodie) L. Cook	33 years	2/25/00
Vernon Yearwood-Drayton	29 years	2/28/00

Childcare Center hosts candy fundraiser

The Ames Childcare Center will be hosting a Spring candy fundraiser from Monday, March 20 through Friday April 7. We invite the Ames community to stop by our table at the Ames Café and purchase candy bars and assorted spring novelty items in support of the Childcare Center.

Ames Childcare Center provides exceptional on-site childcare and parenting programs for Ames civil servants and contractors.

For more information about this fundraiser, contact Jeanne Dominguez at ext. 4-1351. For more information about the ACCC, contact Gabrielle Babin at ext. 4-4182.

Astrogram deadlines

All Ames employees are invited to submit articles relating to Ames projects and activities for publication in the *Astrogram*. When submitting stories or ads for publication, submit your material, along with any questions, in MS word by e-mail to: astrogram@mail.arc.nasa.gov on or before the deadline.

Deadline	*Publication*
Tues, Mar 21	*Mon, Apr 3*
Tues, Apr 4	*Mon, Apr 17*
Tues, Apr 18	*Mon, May 1*

Ames awards contract to support air traffic management research

NASA Ames has awarded two new contracts with a combined value not to exceed $150 million (with no option years), to Raytheon Systems Company, Marlborough, MA, and Computer Sciences Corporation, Federal Sector - Civil Group, Rockville, MD. The contracts will provide air traffic management system development and integration for research and development in the Aerospace directorate at Ames.

Under the terms of each contract, the requirements will be stated in performance-based task orders for technical research and development, studies and task activities for air traffic management concepts and automation technologies.

The contracts will run from date of award to the end of FY 2004 (with no option years). The contracts are Indefinite Delivery/Indefinite Quantity (IDIQ) cost-plus-award-fee/firm fixed price performance-based contracts, with competed contract task orders.

It's the first big car sale of the year!

As part of a special six-hour event, Ames employees who are members of Golden Bay Federal Credit Union may be eligible for promotional 6.99% APR financing on the purchase of a quality used vehicle.

To qualify for this special discount, members simply need to submit a loan application and be pre-approved.

Loan applications can be completed at any of the four Golden Bay Federal Credit Union branches located at Moffett Field, Shoreline, Sunnyvale or San Jose.

Don't miss this one-day, members-only sales event at to be held at 5615 Chesbro Avenue, San Jose, on Saturday March 25, from 8 a.m. to 2 p.m. For more information, call Bill Fultz at (650) 254-2265.

Of note

In addition to the Ames members mentioned on the front page of the March 6 Astrogram story entitled, "McDonald honored for engineering excellence," one other active National Academy of Engineering (NAE) member's name from Ames was inadvertently omitted, namely, Dr. William J. McCroskey. McCroskey recently retired from the Army AFDD and is now an Ames Associate working actively with the Army/NASA Rotorcraft Division. Our apologies for this omission.

THE AMES Astrogram

National Aeronautics and
Space Administration

Ames Research Center
Moffett Field, California 94035-1000

Official Business
Penalty for Private Use, $300

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THE AMES Astrogram

The Ames ASTROGRAM is an official publication of the Ames Research Center, National Aeronautics and Space Administration.

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